

Unit digits

इकाई अंक

बिना घात

(without power)

घात

(Power)

$$25 \times 31 = \dots \textcircled{5}$$

$$21 \times 32 \times 43 \times 54 \times 66 =$$

$$1 \times 2 \times 3 \times 4 \times 6 = \textcircled{4}$$

Maths by Aditya Patel Sir

$$1234 \times 56789 \times 10346 \times 588668 \times 94256897$$

6

6

8

⑥

Ans

इकाई अंक

Unit Digit  $\Rightarrow$

WINNERS

II

$$\begin{array}{r} 123 \\ 5462 \end{array}$$

⇒

8

$$\begin{array}{r} 4 \overline{) 23} \quad (5 \\ - 20 \\ \hline 3 \end{array}$$

$$\Rightarrow \begin{array}{r} 123 \\ 2 \end{array}$$

↓

$$\Rightarrow \begin{array}{r} 23 \div 4 \\ 2 \end{array}$$

$$\Rightarrow 2^3$$

$$\Rightarrow 8 \text{ Ans}$$

Trick

I घात (P) ÷ 4

II शेष (R)  
No. = Ans

÷ 4 की विभाज्यता

---xx

Maths by Aditya Patel Sir

$$\Rightarrow \overset{98}{\underline{\underline{983}}} = ?$$

$$\Rightarrow 3^{98 \div 4}$$

$$\Rightarrow 3^2$$

$$\Rightarrow \underline{\underline{9}} \text{ Ans.}$$

$$\overset{243}{567} = ?$$

$$43 \div 4$$

$$7$$

$$7^3$$

$$\underline{\underline{343}} \text{ Ans}$$

Maths by Aditya Patel Sir

$$\frac{99999}{99999} = ?$$

$$9 \overline{) 99} \div 4$$

$$\Rightarrow 9^3$$

$$\Rightarrow \cancel{7} \cancel{9} 9 \text{ Ans}$$

$$2^{11}$$

$$\cancel{2}^4 \times \cancel{2}^4 \times 2^3$$

$$8$$

Maths by Aditya Patel Sir



$\div 4$

$$2^1 = \underline{2}$$

$$2^2 = \underline{4}$$

$$2^3 = \underline{8}$$

$$\rightarrow 2^4 = \underline{16}$$

$$2^5 = \underline{32}$$

$$2^6 = \underline{64}$$

$$2^7 = \underline{128}$$

$$\rightarrow 2^8 = \underline{256}$$

$$2^9 = \underline{512}$$

$$3^1 = \underline{3}$$

$$3^2 = \underline{9}$$

$$3^3 = \underline{27}$$

$$3^4 = \underline{81}$$

$$3^5 = \underline{243}$$

$$3^6 = \underline{729}$$

$$\vdots$$

$$\underline{\hspace{2cm}}$$

$$3$$

$$9$$

$$27$$

$$81$$

$$4^1 = \underline{4}$$

$$4^2 = \underline{16}$$

$$4^3 = \underline{64}$$

$$4^4 = \underline{256}$$

$$4$$

$$16$$

$$64$$

$$256$$

$$\vdots$$

$$\vdots$$

$$\vdots$$

$$\vdots$$

$$7^1 = \underline{7}$$

$$7^2 = \underline{49}$$

$$7^3 = \underline{343}$$

$$7^4 = \underline{2401}$$

$$7$$

$$49$$

$$343$$

$$2401$$

Maths by Aditya Patel Sir

$$9563^{100 \div 4} = ?$$

$$3^4$$

$$\underbrace{3 \times 3 \times 3 \times 3}$$

① Ans.

$$25982^{444} = ?$$

$$2^{44 \div 4}$$

$$2^4 = 16$$

Ans

शेष (R)

1	=	1
2	=	2
3	=	3
0	=	4

Maths by Aditya Patel Sir

$$\frac{568}{1289} \div 4 = ?$$

$$9^4$$

$$\underbrace{9 \times 9}_{81} \times \underbrace{9 \times 9}_{81}$$

① Ans

$$\frac{349869954689}{123456} = ?$$

Ans = 6

Last		Ans
1	→	1
5	→	5
6	→	6
0	→	0

$$\frac{1 \times 1 \times 1 \times 1 \times 1}{5 \times 5 \times 5 \times 5} \Rightarrow 1$$

$$= \dots 5$$

$$\frac{6 \times 6 \times 6 \times 6}{\dots} = 6$$

Maths by Aditya Patel Sir



999999  
25985

Ans = 5

WINNERS



Maths by Aditya Patel Sir

1. प्रथम 111 पूर्ण संख्याओं के योग का ईकाई अंक = ?

**What is the unit digit of the Sum of first 111 whole No.?**

(a) 5 ✓✓

(b) 4

(c) 9

(d) 6

0, 1, 2, 3, ..., 110

$$\begin{array}{r} 55 \\ 110 \times 111 \\ \hline 2 \end{array}$$

5

Ans.

$$\frac{n(n+1)}{2}$$

1 से n तक संख्याओं  
का योग  
Sum

2.  $81 \times 82 \times 83 \times 84 \dots \times 89$  का ईकाई अंक = ?

(a) 1

~~(b) 0~~

(c) 2

(d) 8

$$81 \times 82 \times 83 \times 84 \times 85 \times 86 \times 87 \times 88 \times 89$$

$$\dots 0 \times \dots = 0$$

$$\checkmark 5 \times \text{सम (even)} = 0$$

$$0 \times N = 0$$

Maths by Aditya Patel Sir



**ADITYA SIR**



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